

Office of Rail and Road
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Dear Sirs

ORR System operation – making better use of the railway network

This response focuses specifically on response to consultation question 2.4 - The right services using the network.

A key number needed to judge what are the “right services” is the true access cost for the network routes. Then the political decision of supporting the ‘right’ services using the network could be made in an open manner.

this would have the following benefits

- NR would have to earn its revenue
- Operators would have to pay real access costs (supported where necessary – no hidden or cross subsidies)
- Competing operators could have in perpetuity access and could become real railway investors
- For urban and rural routes government or local authorities would know what true subsidies were needed
- Freight would know the true cost of access – governments could support rail freight accordingly
- Access costs would let investors identify forecast inflows for new and enhancement projects and thus viable investment

The consultation paper lists but does not rank outcomes of good system operation.

- A. Continued safe operation
- B. Getting more from the network - customers get what they want out of the network in terms of reliability, journey times and minimal interchange.
- C. Choosing the right investment - decisions to expand the network are well-informed and costs are kept at an efficient level.
- D. The right services use the network - network availability is maximised both for today’s use and over the longer term, while capacity is allocated between train operators in a fair, economic and effective way.
- E. Making the right trade-offs
- F. Helping train operators to deliver

Continuing and improving safety (A) is a given.

It is D that is vital for sustained, long term economic viability of UK rail. It is here that the continuing half way house of the 1990's privatisation is letting us down. Knowledge and charging the true cost of access could bring real competition and allow private or state investment. It would also facilitate proper allocation of resources in a private or nationalised system.

The other attributes of and contributors to 'good' system operation feed into D. B – customers have to be considered but will they pay the necessary fares or support the required tax burden?

C - the right investments can be made with knowledge of what maximised capacity means in economic and financial terms.

E - trade offs will be necessary but should be based on reliable economic and financial data rather than partisan or lobbying positions.

If D is based on properly researched and updated data then F – private sector train operators but also a re-nationalised railway will have clear objectives to deliver.

UK rail, and also many other countries railway systems, are not operationally optimised for many reasons. The prime reason is that rail is so political at the macro and micro levels. If you look at the main parties involved in UK rail delivery and investment then there are conflicting and uncoordinated objectives.

The consultation questions

Many of the ORR questions lead to obvious affirmations and ***appendix 1 has observations and opinions with explanations on the questions asked in the paper***

Question 2.4, as is D above, is at the heart of the issues of managing and growing UK rail capacity by incentivising Network Rail and providing a charging regime that should encourage economic and efficient behaviour by all users.

Proven and reliable new technologies should be adopted whenever effective. The problems of effective capacity usage and thus control of Network Rail arise from the continuing **disparate, and lacking long term objectives** for UK rail.

Whilst many private sector operators are competent, the economic and financial structure of UK rail today is primarily one of short-termist extraction of funds from the industry. We should not blame the franchise holders but rather the system in place.

Operating methods, scheduling and even technical innovation will not deliver if UK rail is not considered from the viewpoint of long term "economic capacity", the term I

use. By “economic capacity” I mean a real cash measure of capacity that encompasses annual actual and forecast revenues linked to the true operational and infrastructure costs over the life cycle of the entire railway system

Appendix 2 outlines the rationale for such an approach

“The right services using the network”

Should the question be “Why do we need capacity”?

Rail in the UK (and elsewhere) is so political and suffers from vague and fragmented visions.

Actions to improve capacity are highly desirable, signalling and automatic train control are obvious ones. However the question as to what “capacity” is for is not clear. At the operating level (controlled by our DfT) much timetabling and practice seems to be based on the historical notions of what railways and services are for.

The objectives of the three principal players are least agree in an overall objective that rail is mean to support economic growth and productivity. But growth and productivity are not always aligned.

DfT

We need a modern rail network to support economic growth and productivity, and to help people get around quickly and safely

ORR

The railway network needs to be run for the benefit of the whole country.

The ORR role includes: setting the overall strategic direction for Network Rail and more specifically targets for performance and efficiency

NR - strategic goals for the Long Distance Market

Enabling economic growth

- by providing sufficient capacity for people travelling to take part in economically productive activities

These can be interpreted in different ways. It is good to see the focus on economic growth and productivity; travelling to take part in economically productive activities.

One aspect of the “needs to be run for the benefit of the whole country” are the rooted notion that a railway service is a “human right”, that the DfT knows and will dictate what is best. Metro and commuter routes and services are essential and require clear direction. They will almost always need support and those that carp at this should note that London and other conurbations would not function and deliver

“economically productive activities” without their railway systems. Freight relieves our road network, but above all is an efficient if not the only viable means of transporting many products. With adequate capacity rail freight could do so much more – and in an environmentally effective manner.

The capacity problem is in the South East (and this affects route capacity to the rest of the country)

Table 4 on page 52 of the concurrent Competition and Markets Authority paper on UK rail competition starkly makes the point that traffic volumes are in London and the South East.

Table 4: Estimated future demand for rail services in 2018–2019

HLOS	Peak three hours*		High peak hour	
	Forecast passenger demand in 2013–2014†	Extra passenger demand to be met by 2018–2019	Forecast passenger demand in 2013–2014	Extra passenger demand to be met by 2018–2019
Major cities‡				
London	539,300	119,000	268,500	54,200
Birmingham	37,500	3,900	19,200	1,800
Leeds	25,400	5,100	13,000	2,800
Manchester	28,100	6,200	13,600	2,600
Others	34,800	4,900	16,500	2,000

Source: Network Rail.

The power house that is London and the economic necessity of commuter routes limits capacity on the intercity routes. The need to build Cross Rail 2 is vital not simply for London’s population growth but also to free paths out of termini. It is self evident that building solely a new HS line north will not solve the majority of UK rail capacity problems. New HES (High Enough Speed max 200km/hr) lines from Paddington to Reading, Waterloo to Surbiton or Euston to Milton Keynes would greatly increase capacity. Or how about tracks over or tunnels under the first 20m miles or so out of termini? Tunnels from Euston to Waterloo for through services? These suggestions can no doubt be dismissed as impractical.

With increased capacity in all directions out of London, and also other cities and pinch points, capacity would be available and allow much needed competition on many routes.

Managing demand

The simplest way is by pricing and in spite of all that is said the average (time adjusted) revenue per passenger on say the ECML might not be much higher than in BR days. A flaw of the current monopoly franchises is that the principal driver for the short term franchise operators is to extract as much cash as possible over the franchise. Fill the trains to get daily cash flow

Variable prices and choice

For commuters why not adopt an 'Uber' approach? The technology is there, there are gates everywhere! An annual season ticket holder could pay £x as now and rather like some mobile phone tariffs be credited with say 1,000 "journeys" Then travel departing (from zones) to London before 7 and after 9 would deduct 1 journey's worth. Departing between 7 and 9 would deduct 2 journeys. Departing after 8 at night or on Saturdays the trip could 'cost' one half journey and so on. Fridays and Sunday evenings on some routes could be at an even higher premium.

This would ration demand but with the users having choice.

Long distance services misuse capacity

It is the long distance services that now do, and in the future will, misuse capacity. The reasons are twofold:

1. the short term, tightly controlled, monopoly franchises. Just one example – why run 3 trains an hour to Manchester- all day? Why run a half hourly service London to Edinburgh most of the day? Why no competition?
2. an historic rationale for running many services – who will travel tomorrow and why? what level of service will they want?

The positive is that as 10% or less of the population use trains then there is a huge market to capture.

The forecasts for futures use seem to be based on existing customer demographics, available technologies and attitudes.

Where rail travel may be heading seems to be ignored:

- Urbanisation is a global phenomenon – metro and commuter lines are essential
- Air travel gets cheaper and cheaper (per passenger km)
- People like their cars
- How will the likes of the Google Self-Driving Car (SDC) affect rail?
- Will so many people travel to universities? On-line learning could be of much higher quality
- The demographics point to fewer older travellers.
- UK tourism may well increase – but do visitors want crammed into a train that has a bus or aeroplane environment?

Rail has very attractive attributes but these seem to be lost in outdated ideas of what rail services are about. Do any marketing folk ever consult the 90% of UK non-rail travellers?

In summary

Do we really know why we will need capacity?

Whatever the capacity demands let decisions be made on reliable consistent figures

Let NR earn its revenue

Let operators pay the price

Let taxpayers know what they are paying for.

We need to know the long term access costs

Appendix 1 - Answers and opinions on the ORR questions

Consultation question 1

As discussed in section 2, to deliver good system operation, we think system operation involves these functions:

1. Developing proposals for changes to the network
AGREED
2. Choosing projects for changes to the network
AGREED
3. Determining capacity from the physical network
AGREED
4. Allocating capacity (including to possessions) and performance
ABSOLUTELY
and this is critical for the long term viability of railways in the UK
5. Operating the system (including at the route level) enabling services to run
AGREED

It is not simply physical capacity - train paths but “economic capacity” that must be considered for viability. Economic capacity can be looked at from the perspective of total revenues of the system (and from total benefits of the system).

Consultation question 2

As discussed in section 3, through our work on system operation we want to improve how the railway meets the current and future needs of passengers, freight customers and funders. We think a greater focus on system operation can improve outcomes in six areas:

1. Continued safe operation A GIVEN
2. Choosing the right investment ESSENTIAL;
3. Making the right trade-offs VERY POLITICAL ;
4. The right services using the network ABSOLUTELY BUT IS THIS SOCIALLY OR ECONOMICALLY?
5. Helping train operators to deliver OF COURSE
6. Choosing the right investment

What are your views on the outcomes of good system operation that we have set out in this consultation?

Consultation question 3

Can you give us any examples, based on your experience, where these functions improve outcomes?

This could include examples of when system operation has helped you in running your business and delivering for your customers. Please also feel free to highlight any areas where you think system operation could help you in the future.

Consultation question 4

To regulate and incentivise Network Rail, we use a range of tools, such as regulating and monitoring Network Rail against certain outcomes and providing for a charging regime that should encourage economic and efficient behaviour by all users.

Do you have any views on what the desired outcomes and functions associated with system operation might mean for the regulation and incentivisation of network system operation?

Please highlight any particular areas where you think a different approach to regulation or incentivisation of system operation could help you better run your business in the future, and why.

NR should earn its income to operate as flawlessly as possible which of course means that it will deliver capacity reliably. Income has to be spent on operating reliability and any surplus on investment to increase capacity and efficiencies.

Appendix 2 - Rationale and need for such an approach

The approach of having cash flow based access charges would give an annual cost for traffic on each route. The exercise of calculating a per-train charge can be made as complicated as desired. With adjustment of the per train access cost to take account of wear and tear – eg heavy freight v train to tram as extremes by iteration a realistic cost per-train for the various classes of train can be established. And of course volume of traffic has to be considered - it is easy to justify closing a line if you cut back services to one train a day!

For many routes the UK apparently has capacity overload – there are too many potential trains. It is essential to know what the cost per train is with the likely proposed services.

The total charges per route would be NR's revenue – all coming from operators, albeit freight and, rural and metro passenger requiring support.

NR would then at least be like a real company – having to earn its revenue, not simply being a controller of operating and capital costs.

Whilst the measure of revenues could include 'intangible' benefits as one might for justification in building new lines such as Crossrail or HS2, we should heed definitions of intangible which include "difficult or impossible to define or understand; vague, or impossible to be grasped mentally". It is best that intangibles are measured but used as support (or not) when the strategic or political decisions have to be made.

The UK freight operators with their right to open (although often restricted) access are clear on the need to make returns on their investments in locomotives, depots etc. Existing passenger franchise holders cannot really have any other objective than to extract as much cash as possible during the term of their franchise.

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